## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. **(Withdrawn)** A cannula for use with a therapy delivery device for providing treatment therapy to a volume of neural tissue, the cannula comprising in combination:

(a) a proximal end capable of receiving at least two leads;

(b) a body; and

(c) a distal end having at least two apertures, each aperture capable of directing at least one of the leads outwardly along a distinct predetermined trajectory.

2. **(Withdrawn)** A lead system for providing treatment therapy to a volume of neural tissue comprising in combination:

(a) cannula having a lumen distal end, the lumen distal end having at least two openings, each opening capable of directing a lead outwardly along a distinct predetermined trajectory;

(b) at least two leads insertable within the cannula; and

(c) at least one therapy delivery element at a distal end of each lead.

3. **(Withdrawn)** The lead system of claim 2, wherein the therapy delivery element is an electrode to provide stimulation therapy.

4. **(Withdrawn)** The lead system of claim 2, further comprising:

(d) a therapy delivery device selectively providing treatment therapy via the therapy delivery element.

5. **(Withdrawn)** The lead system of claim 4, wherein the therapy delivery device is a signal generator and the therapy delivery element is an electrode.

6. **(Withdrawn)** The lead system of claim 5, further comprising:

(e) means for selectively adjusting an electric field created by delivery of stimulation energy to each electrode by the signal generator.

7. **(Withdrawn)** The lead system of claim 2, wherein the therapy delivery element is an catheter to delivery at least one therapeutic substance.

8. **(Withdrawn)** The lead system of claim 4, wherein the therapy delivery device is a drug delivery device and the therapy delivery element is a catheter.

9. **(Withdrawn)** The lead system of claim 8, further comprising:

(e) means for selectively adjusting a relative drug delivery by the pump to each catheter.

10. **(Withdrawn)** The lead system of claim 2, further comprising:

(d) a sensor for generating a signal related to an extent of a condition to be treated; and

(e) a processor responsive to the sensor for adjusting at least one parameter of a treatment therapy provided to the therapy delivery element.

11. **(Withdrawn)** The lead system of claim 2, further comprising:

(d) a sensor for generating a signal related to an extent of a condition to be treated; and

(e) a processor responsive to the sensor for selectively altering a relative treatment therapy delivery delivered through the therapy delivery elements.

12. **(Withdrawn)** A method for implanting leads to provide treatment therapy to a volume of neural tissue comprising the steps of:

(a) positioning a cannula within a body of a patient, the cannula having at least two openings near a distal end, each opening capable of directing a lead outwardly along a distinct predetermined trajectory;

(b) inserting at least two leads into the cannula; and

(c) directing a distal end of each lead outwardly through one of the openings and along the distinct predetermined trajectory determined by the opening.

13. **(Withdrawn)** The method of claim 12, wherein the step of positioning comprises the step of positioning the cannula within a brain of the patient.

14. **(Withdrawn)** The method of claim 12, wherein the step of positioning comprises the step of positioning the cannula within a spinal cord of the patient.

15. **(Withdrawn)** The method of claim 12, wherein the step of positioning comprises the step of positioning the cannula within a peripheral nerve of the patient.

16. **(Withdrawn)** A method for implanting leads to provide treatment therapy to a volume of neural tissue comprising the steps of.

(a) implanting a cannula within a body of a patient;

(b) inserting first and second leads into the cannula;

(c) directing a first distal end of the first lead outwardly through the cannula and along a first distinct predetermined trajectory; and

(d) directing a second distal end of the second lead outwardly through the cannula and along a second distinct predetermined trajectory.

17. **(Withdrawn)** The method of claim 16, wherein the step of implanting comprises the step of positioning the cannula within a brain of the patient.

18. **(Withdrawn)** The method of claim 16, wherein the step of implanting comprises the step of positioning the cannula within a spinal cord of the patient.

19. **(Withdrawn)** The method of claim 16, wherein the step of implanting comprises the step of positioning the cannula within a peripheral nerve of the patient.

20. **(Withdrawn)** A method of providing treatment therapy to a volume of neural tissue of a patient comprising the steps of:

(a) implanting a cannula within a predetermined site of the patient;

(b) inserting at least two leads into the cannula and directing each lead outwardly through an opening along a distal end of the cannula, each lead extending from the cannula along a distinct predetermined trajectory; and

(c) positioning a therapy delivery element on the distal end of each lead to provide treatment therapy to the volume of neural tissue.

21. **(Withdrawn)** The method of claim 20, wherein the step of implanting comprises the step of implanting the cannula within a brain of the patient.

22. **(Withdrawn)** The method of claim 20, wherein the step of implanting comprises the step of implanting the cannula within a spinal cord of the patient.

23. **(Withdrawn)** The method of claim 20, wherein the step of implanting comprises the step of implanting the cannula within a peripheral nerve of the patient.

24. **(Withdrawn)** The method of claim 20, wherein the volume of neural tissue is selected from the group consisting of a subthalamic nucleus (STN), a peduncular pontine nucleus (PPN), a caudate, a putamen, an internal palladium, an external palladium, a cingulum, an anterior limb of an internal capsule, an anterior nucleus (AN), a centremedian (CM), a dorsal medial nucleus, a nucleus of a thalamus, a hippocampus, a structure in a temporal lobe, a hypothalamus, a structure of a diencephalons, a pons, a medulla, a corext, a cerebellum, a lateral geniculate body, and a medial geniculate body.

25. **(Withdrawn)** The method of claim 20, wherein the therapy delivery element is an electrode.

26. **(Withdrawn)** The method of claim 25, further comprising the steps of:

(d) establishing an anode/cathode relationship between at least two electrodes; and

(e) presenting electrical pulses to the established anode/cathode relationships of the electrodes, whereby neural tissue are activated.

27. **(Withdrawn)** The method of claim 20, wherein the therapy delivery element is a catheter.

28. **(Withdrawn)** A system for providing treatment therapy to a volume of neural tissue comprising in combination:

(a) cannula having a lumen distal end, the lumen distal end having at least two openings, each opening capable of directing an object outwardly along a distinct predetermined trajectory;

(b) at least one lead insertable within the cannula and capable of being directed outwardly through one of the openings of the cannula and having at least one electrode at a distal end of the lead;

(c) at least one catheter insertable within the cannula and capable of being directed outwardly through another one of the openings of the cannula;

(d) a signal generator coupled to the lead for providing electrical stimulation to the neural tissue; and

(e) a drug delivery device coupled to the catheter for delivering at least one drug to the neural tissue.

29. **(Withdrawn)** The system of claim 28 further comprising:

(f) means for selectively adjusting an electric field created by the signal generator.

30. **(Withdrawn)** The system of claim 28 further comprising:

(f) means for selectively adjusting a rate of drug delivery by the drug delivery device to the catheter.

31. **(Withdrawn)** The system of claim 28 further comprising:

(f) a sensor for generating a signal related to an extent of a condition to be treated; and

(g) a processor responsive to the sensor for adjusting at least one parameter of a treatment therapy provided by the signal generator.

32. **(Withdrawn)** The system of claim 28 further comprising:

(f) a sensor for generating a signal related to an extent of a condition to be treated; and

(a) a processor responsive to the sensor for adjusting at least one parameter of a treatment therapy provided by the drug delivery device.

33. **(Withdrawn)** The system of claim 28 further comprising:

(a) a sensor for generating a signal related to an extent of a condition to be treated; and

(b) a processor responsive to the sensor for selectively altering a relative treatment therapy delivery delivered by the signal generator.

34. **(Withdrawn)** The system of claim 28 further comprising:

(a) a sensor for generating a signal related to an extent of a condition to be treated; and

(b) a processor responsive to the sensor for selectively altering a relative treatment therapy delivery delivered by the drug delivery device.

35. **(Withdrawn)** A method for providing treatment therapy to a volume of neural tissue comprising the steps of:

(a) implanting a cannula within a body of a patient;

(b) inserting at least one lead into the cannula;

(c) directing a lead distal end of first lead outwardly through the cannula and along a first distinct predetermined trajectory;

(d) inserting at least one catheter into the cannula; and

(e) directing a catheter distal end of the catheter outwardly through the cannula and along a second distinct predetermined trajectory.

36. **(Withdrawn)** The method of claim 35, further comprising the steps of:

(f) coupling the lead to a signal generator for providing electrical stimulation to the neural tissue; and

(g) coupling the catheter to a drug delivery device for delivering at least one drug to the neural tissue.

37. **(Withdrawn)** The method of claim 36, further comprising the step of

(h) selectively adjusting an electric field created by the signal generator.

38. **(Withdrawn)** The method of claim 36, further comprising the step of:

(h) selectively adjusting a rate of drug delivery by the drug delivery device to the catheter.

39. **(Withdrawn)** The method of claim 36, further comprising the step of.

(h) sensing an extent of a condition to be treated; and

(i) adjusting in response to the step of sensing at least one parameter of a treatment therapy provided by the signal generator.

40. **(Withdrawn)** The method of claim 36, further comprising the step of:

(h) Sensing an extent of a condition to be treated; and

(i) adjusting in response to the step of sensing at least one parameter of a treatment therapy provided by the drug delivery device.

41. **(Withdrawn)** The method of claim 35, wherein the step of implanting comprises the step of implanting the cannula within a brain of the patient.

42. **(Withdrawn)** The method of claim 35, wherein the step of implanting comprises the step of implanting the cannula within a spinal cord of the patient.

43. **(Withdrawn)** The method of claim 35, wherein the step of implanting comprises the step of implanting the cannula within a peripheral nerve of the patient.

44. **(Withdrawn)** The method of claim 35, wherein the volume of neural tissue is selected from the group consisting of a subthalamic nucleus (STN), a peduncular pontine nucleus (PPN), a caudate, a putamen, an internal palladium, an external palladium, a cingulum, an anterior limb of an internal capsule, an anterior nucleus (AN), a centremedian (CM), a dorsal medial nucleus, a nucleus of a thalamus, a hippocampus, a structure in a temporal lobe, a hypothalamus, a structure of a diencephalons, a pons, a medulla, a corext, a cerebellum, a lateral geniculate body, and a medial geniculate body.

45. **(Withdrawn)** The method of claim 36, further comprising the steps of:

(h) establishing an anode/cathode relationship between at least two electrodes; and

(i) presenting electrical pulses to the established anode/cathode relationships of the electrodes, whereby neural tissue are activated.

46. **(Withdrawn)** A lead system for providing treatment therapy to a volume of neural tissue comprising in combination:

(a) cannula having a lumen distal end, the lumen distal end having at least two openings, each opening capable of directing a lead outwardly along a distinct predetermined trajectory;

(b) at least two leads insertable within the cannula;

(c) at least one therapy delivery element at a distal end of at least one of the leads;

(d) at least one sensor at a distal end of at least one of the lead; and

(e) a processor responsive to the sensor for adjusting at least one parameter of a treatment therapy provided to the therapy delivery element.

47. **(Withdrawn)** A lead system as claimed in claim 46, further comprising a signal generator and wherein the therapy delivery element is an electrode.

48. **(Withdrawn)** A lead system as claimed in claim 46, further comprising a pump and wherein the therapy delivery element is a catheter.

49. **(Withdrawn)** A lead system as claimed in claim 46, further comprising:

(f) means for selectively altering the relative treatment therapy delivered through each of the therapy delivery elements.

50. **(Withdrawn)** A lead system for providing treatment therapy to a volume of neural tissue comprising in combination:

(a) cannula having a lumen distal end, the lumen distal end having at least two openings, each opening capable of directing a lead outwardly along a distinct predetermined trajectory;

(b) at least two leads insertable within the cannula;

(c) at least one therapy delivery element at a distal end of at least one of the leads;

(d) at least one sensor at a distal end of at least one of the lead; and

(e) a processor responsive to the sensor for selectively altering a relative treatment therapy delivery delivered through the therapy delivery element.

51. **(Withdrawn)** A lead system as claimed in claim 50, further comprising a signal generator and wherein the therapy delivery element is an electrode.

52. **(Withdrawn)** A lead system as claimed in claim 50, further comprising a pump and wherein the therapy delivery element is a catheter.

53. **(Withdrawn)** A lead system as claimed in claim 50, further comprising:

(f) means for selectively altering the relative treatment therapy delivered through each of the therapy delivery elements.

54. **(Withdrawn)** A method for providing treatment therapy to a volume of neural tissue comprising the steps of:

(a) positioning a cannula within a predetermined treatment site within a patient, the cannula having at least one opening near a distal end capable of directing a lead outwardly along a predetermined non-colinear trajectory;

(b) inserting at least two leads into the cannula, wherein at least one lead has at least one therapy delivery element on a lead end of the lead and at least one lead has a sensor on the lead end of the lead; and

(c) directing the lead ends through at least one of the openings of the cannula and outwardly along the predetermined non-colinear trajectory;

(d) positioning the therapy delivery elements in a non-linear configuration;

(e) providing treatment therapy to the predetermined treatment site via the therapy delivery device

(f) sensing with the sensor the extent of the treatment therapy being provided and generating a sensor signal; and

(g) adjusting at least one parameter of the treatment therapy provided to the therapy delivery device in response to the sensor signal.

55. **(Withdrawn)** A method as claimed in claim 54, wherein the predetermined treatment is a volume of a brain.

56. **(Withdrawn)** A method as claimed in claim 55, wherein the predetermined treatment site is selected from the group consisting of subthalamic nucleus (STN), peduncular pontine nucleus (PPN), caudate, putamen, internal palladium, external palladium, cingulum, anterior limb of an internal capsule, anterior nucleus (AN), centremedian (CM), dorsal medial nucleus, a nucleus of a thalamus, hippocampus, a structure in a temporal lobe, hypothalamus, a structure of a diencephalon, pons, medulla, cortex, cerebellum, lateral geniculate body, and medial geniculate body.

57. **(Withdrawn)** A method as claimed in claim 54, wherein the predetermined treatment site is a volume of a spinal cord parenchyma.

58. **(Withdrawn)** A method as claimed in claim 54, wherein the predetermined treatment site is a volume of a peripheral nerve.

59. **(Withdrawn)** A method as claimed in claim 54, wherein the therapy delivery element is an electrode.

60. **(Withdrawn)** A method as claimed in claim 59, further comprising the steps of:

(h) establishing an anode/cathode relationship between at least two electrodes of the lead; and

(i) presenting electrical pulses to the established anode/cathode relationships of the electrodes of the lead, whereby neural tissue are activated in the in the predetermined treatment site.

61. **(Withdrawn)** A method as claimed in claim 59, further comprising the steps of:

(h) establishing an anode/cathode relationship between at least one electrode of the lead and the therapy delivery device; and

(i) presenting electrical pulses to the established anode/cathode relationship.

62. **(Withdrawn)** A method as claimed in claim 54, wherein the therapy delivery element is a catheter.

Please add the following claims:

63. **(Withdrawn)** A lead system for providing treatment therapy to a volume of neural tissue comprising in combination:

cannula having a lumen distal end, the lumen distal end having a plurality of openings, each opening capable of directing a lead outwardly along a distinct predetermined trajectory;

a first lead and a second lead that are insertable within the cannula, wherein the first lead protrudes through a first opening of the cannula and the second lead protrudes through a second opening of the cannula;

a first set of electrodes at a first distal end of the first lead and a second set of electrodes at a second distal end of the second lead, wherein each set comprises at least one electrode, and wherein the first set of electrodes and the second set of electrodes generate electrical stimulation for providing the treatment therapy;

a first sensor that generates a first signal that is indicative of a condition to be treated; and

a processor that receives the first signal from the first sensor and that causes the first set and second set of electrodes to deliver the electrical stimulation.

64. **(Withdrawn)** The lead system of claim 63, wherein the treatment therapy is for a nervous system disorder.

65. **(Withdrawn)** The lead system of claim 64, wherein the nervous system disorder is selected from the group consisting of a disorder of a central nervous system, a disorder of a peripheral nervous system, a mental health disorder, and a psychiatric disorder.

66. **(Withdrawn)** The lead system of claim 65, wherein the nervous system disorder is selected from the group consisting of epilepsy, Parkinson's disease, essential tremor, dystonia, multiple sclerosis (MS), anxiety, a mood disorder, a sleep disorder, obesity, and anorexia.

67. **(Withdrawn)** The lead system of claim 63, wherein the first sensor corresponds to a constituent electrode of one of the sets of electrodes.

68. **(Withdrawn)** The lead system of claim 63, wherein the processor is configured to perform:

(a) reading at least one parameter that is associated with the treatment therapy;

(b) obtaining a level of the first signal; and

(c) determining a stimulation configuration of the first set and the second set of electrodes according to the level of the first signal and the at least one parameter.

69. **(Withdrawn)** The lead system of claim 68, further comprising:

(d) adjusting the at least one parameter in response to the level of the first signal.

70. **(Withdrawn)** The lead system of claim 69, wherein (d) comprises:

(1) if a timer has expired and if the at least one parameter has not changed during a corresponding time interval, reducing the at least one parameter.

71. **(Withdrawn)** The lead system of claim 69, wherein (d) comprises:

(1) changing the at least one parameter in response to the level of the first signal; and

(2) resetting a timer to restart a corresponding time interval.

72. **(Withdrawn)** The lead system of claim 68, wherein (c) comprises:

(1) if the lead system is programmed to block neural activity, determining whether a stimulation target activity is excessive in accordance with the level of the first signal;

(2) in response to (1), increasing at least one setting that is associated with the stimulation configuration, wherein the at least one setting does not exceed a maximum value.

73. **(Withdrawn)** The lead system of claim 72, wherein (c) further comprises:

(3) if the at least one setting exceeds the maximum value, providing an indicative output.

74. **(Withdrawn)** The lead system of claim 72, wherein the at least one setting is selected from the group consisting of a frequency of stimulation, an amplitude of stimulation, and a pulse width of stimulation.

75. **(Withdrawn)** The lead system of claim 68, wherein (c) comprises:

(1) if the lead system is programmed to increase neural activity, determining whether a stimulation target activity is not sufficient in accordance with the level of the first signal;

(2) in response to (1), increasing at least one setting that is associated with the stimulation configuration, wherein the at least one setting does not exceed a maximum value.

76. **(Withdrawn)** The lead system of claim 75, wherein (c) further comprises:

(3) if the at least one setting exceeds the maximum value, providing an indicative output.

77. **(Withdrawn)** The lead system of claim 75, wherein the at least one setting is selected from the group consisting of a frequency of stimulation, an amplitude of stimulation, and a pulse width of stimulation.

78. **(Withdrawn)** The lead system of claim 63 further comprising a second sensor that generates a second signal that is indicative of the condition to be treated, and wherein the processor receives the second signal, and wherein the processor causes the first set and second set of electrodes to deliver the electrical stimulation in accordance with levels of the first signal and second signal.

79. **(Withdrawn)** A lead system that provides treatment therapy for a nervous system disorder to a volume of neural tissue comprising in combination:

cannula having a lumen distal end, the lumen distal end having a plurality of openings, each opening capable of directing a lead outwardly along a distinct predetermined trajectory;

a first lead and a second lead that are insertable within the cannula, wherein the first lead protrudes through a first opening of the cannula and the second lead protrudes through a second opening of the cannula;

a first set of electrodes at a first distal end of the first lead and a second set of electrodes at a second distal end of the second lead, wherein each set comprises at least one electrode, and wherein the first set of electrodes and the second set of electrodes generate electrical stimulation for providing the treatment therapy;

a sensor that generates a signal that is indicative of a condition to be treated; and

a processor that receives the signal from the sensor and that causes the first set and second set of electrodes to deliver the electrical stimulation in accordance with a level of the signal, wherein the processor is configured to perform:

(a) reading at least one parameter that is associated with the treatment therapy;

(b) obtaining the level of the signal;

(c) if the lead system is programmed to block neural activity, determining whether a stimulation target activity is excessive in accordance with the level of the signal;

(d) if the lead system is programmed to increase neural activity, determining whether the stimulation target is not sufficient in accordance with the level of the signal; and

(e) in response to (c) and (d), increasing at least one setting that is associated with the stimulation configuration, wherein the at least one setting does not exceed a maximum value.

80. **(Currently Amended)** An implantable agent delivery system for providing treatment therapy to a volume of neural tissue comprising in combination:

a cannula having a central lumen distal end with a plurality of openings provided near the lumen distal end, each opening capable of directing a catheter outwardly along a distinct predetermined trajectory, at least one of the openings having a curved passageway so as to direct ~~capable of directing~~ a catheter away from the central axis of the cannula along the predetermined trajectory, wherein, in operation, slicing caused by installation of the catheter may be substantially avoided;

a first catheter and a second catheter that are insertable within the cannula, wherein the first catheter protrudes through a first opening of the cannula and the second catheter protrudes through a second opening of the cannula, wherein each catheter is positioned to deliver a liquid agent, and wherein the liquid agent has a desired effect in providing the treatment therapy; and

a therapy delivery device that stores the liquid agent and couples to the first catheter and the second catheter to deliver the liquid agent.

81. **(Cancelled)**.

82. **(Previously Presented)** The agent delivery system of claim 80, wherein the therapy delivery device comprises a replenishment port, and wherein additional liquid agent is inserted into the therapy delivery device through the replenishment port.

83. **(Previously Presented)** The agent delivery system of claim 82, wherein the additional liquid agent is injected with a hypodermic needle through the replenishment port.

84. **(Previously Presented)** The agent delivery system of claim 80, further comprising:

a first sensor that generates a first signal that is indicative of a condition to be treated; and

a processor that is coupled to the first sensor, that receives the first signal from the first sensor, and that causes the first catheter and the second catheter to deliver the liquid agent at a desired rate.

85. **(Previously Presented)** The agent delivery system of claim 80, wherein the therapy delivery device is coupled to a first and a second catheter, wherein the delivery system is configured to deliver at least two drugs through the first and second catheters.

86. **(Previously Presented)** The agent delivery system of claim 80, wherein the treatment therapy is for a neurological disorder.

Claims 87-88. **(Cancelled)**

89. **(Previously Presented)** The agent delivery system of claim 80, wherein the liquid agent is selected from the group consisting of a medication and a drug.

90. **(Previously Presented)** The agent delivery system of claim 84, wherein the therapy delivery device comprises a pump, and wherein the processor is coupled to the pump to provide the desired rate of infusing the liquid agent through said each catheter.

91. **(Previously Presented)** The agent delivery system of claim 84, wherein the processor is configured to perform:

(a) reading at least one parameter that is associated with the treatment therapy;

(b) obtaining a level of the first signal; and

(c) determining a desired rate of infusing the liquid agent through the first catheter and the second catheter according to the level of the first signal and the at least one parameter.

92. **(Previously Presented)** The agent delivery system of claim 91, wherein the processor is further configured to perform:

(d) adjusting the at least one parameter in response to the level of the first signal.

93. **(Previously Presented)** The agent delivery system of claim 92, wherein (d) comprises:

(1) if a timer has expired and if the at least one parameter has not changed during a corresponding time interval, reducing the at least one parameter.

94. **(Previously Presented)** The agent delivery system of claim 92, wherein (d) comprises:

(1) changing the at least one parameter in response to the level of the first signal; and

(2) resetting a timer to restart a corresponding time interval.

95. **(Previously Presented)** The agent delivery system of claim 91, wherein (c) comprises:

(1) if the agent delivery system is programmed to block neural activity, determining whether a target activity is excessive in accordance with the level of the first signal; and

(2) in response to (1), increasing at least one setting that is associated with the desired rate of infusing the liquid agent, wherein the at least one setting does not exceed a maximum value.

96. **(Previously Presented)** The agent delivery system of claim 95, wherein (c) further comprises:

(3) if the increasing in (2) would cause the at least one setting to exceeds the maximum value, providing an indicative output.

97. **(Previously Presented)** The agent delivery system of claim 91, wherein (c) comprises:

(1) if the agent delivery system is programmed to increase neural activity, determining whether a target activity is not sufficient in accordance with the level of the first signal; and

(2) in response to (1), increasing at least one setting that is associated with the desired rate of infusing the liquid agent, wherein the at least one setting does not exceed a maximum value.

98. **(Previously Presented)** The agent delivery system of claim 97, wherein (c) further comprises:

(3) if the increasing in (2) would cause the at least one setting to exceeds the maximum value, providing an indicative output.

99. **(Previously Presented)** The agent delivery system of claim 84 further comprising a second sensor that generates a second signal that is indicative of the condition to be treated, and wherein the processor receives the second signal, and wherein the processor causes the first catheter and the second catheter to deliver the liquid agent in accordance with levels of the first signal and second signal.

100. **(Previously Presented)** The agent delivery system of claim 84, further comprising:

an interface that is connected to the processor; and

a programmer that communicates to the processor through the interface to configure the processor in accordance with the therapy treatment.

101. **(Previously Presented)** The agent delivery system of claim 100, wherein the programmer communicates to the processor over a telemetry communications link.

102. **(Currently Amended)** An implantable drug delivery system that provides treatment therapy for a nervous system disorder to a volume of neural tissue comprising in combination:

a cannula having a lumen distal end with a plurality of openings provided near the lumen distal end, each opening capable of directing a catheter outwardly along a distinct predetermined trajectory, at least one of the openings having a curved passageway so as to direct ~~capable of directing~~ a catheter away from the central axis of the cannula along the predetermined trajectory, wherein, in operation, slicing caused by installation of the catheter may be substantially avoided;

a first catheter and a second catheter that are insertable within the cannula, wherein the first catheter protrudes through a first opening of the cannula and the second catheter protrudes through a second opening of the cannula, wherein each catheter is positioned to deliver a drug, and wherein the drug has a desired effect in providing the treatment therapy;

a pump that stores the drug and couples to the first catheter through a first catheter port and the second catheter through a second catheter port to deliver the drug at a desired rate;

a sensor that generates a signal that is indicative of a condition to be treated; and

a processor that is coupled to the sensor in order to receive the signal from the sensor and that instructs the pump to infuse the drug at the desired rate through the first catheter and the second catheter.

103. **(Currently Amended)** An implantable agent delivery system for providing treatment therapy to a volume of neural tissue comprising in combination:

a cannula having a lumen distal end with a plurality of openings provided near the lumen distal end, each opening capable of directing a catheter outwardly along a distinct predetermined trajectory, at least one of the openings having a curved passageway so as to direct ~~capable of directing~~ a catheter away from the central axis of the cannula along the predetermined trajectory, wherein, in operation, slicing caused by installation of the catheter may be substantially avoided;

a first catheter and a second catheter that are insertable within the cannula, wherein the first catheter protrudes through a first opening of the cannula and the second catheter protrudes through a second opening of the cannula, wherein each catheter is positioned to deliver a liquid agent; and

a therapy delivery device that stores the liquid agent and couples to the first catheter and the second catheter to deliver the liquid agent.

104. **(Previously Presented)** The agent delivery system of claim 103, wherein the first catheter delivers the liquid agent to a first position and the second catheter delivers the liquid agent to a second position, the agent delivery system further comprising:

a sensor that generates a signal, the sensor being located in a proximity of one of the positions; and

a processor that is coupled to the first sensor, that receives the signal from the sensor, and that causes the first catheter and the second catheter to deliver the liquid agent in accordance with the signal.

105. **(Previously Presented)** An agent delivery system of claim 104, further comprising:

an interface that is connected to the processor; and

an external programmer that communicates to the processor through the interface to configure the processor in accordance with the therapy treatment.

106. **(Previously Presented)** An agent delivery system of claim 103, wherein the therapy delivery has a port, and wherein additional liquid agent is inserted into the therapy delivery device through the port.

107. **(Previously Presented)** The agent delivery system of claim 103, wherein the treatment therapy is for a neurological disorder.

108. **(Cancelled)**

109. **(Cancelled)**

110. **(Withdrawn)** An agent delivery system for providing treatment therapy to a volume of neural tissue comprising in combination:

cannula having a lumen distal end, the lumen distal end having a plurality of openings, each opening capable of directing a catheter outwardly along a distinct predetermined trajectory; and

a first catheter and a second catheter that are insertable within the cannula, wherein the first catheter protrudes through a first opening of the cannula and the second catheter protrudes through a second opening of the cannula, the first catheter obtaining a first liquid agent though a first catheter port, the second catheter obtaining a second liquid agent through a second catheter port, wherein the first catheter is positioned to deliver the first liquid agent and the second catheter is positioned to deliver the second liquid agent.

111. **(Withdrawn)** The agent delivery system of claim 110, wherein the first liquid agent and the second liquid agent are characterized by essentially a same chemical composition.

112. **(Withdrawn)** The agent delivery system of claim 110, wherein the cannula directs the first catheter along a first predetermined trajectory.

113. **(Withdrawn)** The agent delivery system of claim 112, wherein the cannula directs the second catheter along a second predetermined trajectory.

114. **(Withdrawn)** An agent delivery system for providing treatment therapy to a volume of neural tissue comprising in combination:

cannula having a lumen distal end, the lumen distal end having a plurality of openings; and

a first catheter and a second catheter that are insertable within the cannula, wherein the first catheter protrudes through a first opening of the cannula and the second catheter protrudes through a second opening of the cannula, the first catheter obtaining a liquid agent though a first catheter port, the second catheter obtaining the liquid agent through a second catheter port, the first catheter having a first predisposition to project

from the first opening at an approximate first angle, wherein the first catheter and the second catheter are positioned to deliver the liquid agent.

115. **(Withdrawn)** The agent delivery system of claim 114, wherein the second catheter has a second predisposition to project from the second opening at an approximate second angle.

116. **(Withdrawn)** The agent delivery system of 114, wherein the first catheter has a predetermined bend to establish the first predisposition.

117. **(Withdrawn)** The agent delivery system of 114, wherein the first catheter comprises a material having a contour memory to establish the first predisposition.

118. **(Withdrawn)** An agent delivery system for providing treatment therapy to a volume of neural tissue comprising in combination:

cannula having a lumen distal end, the lumen distal end having at least one opening; and

a first catheter array comprising:

an inner catheter, the inner catheter obtaining a liquid agent through a catheter port; and

a plurality of outer catheters that are arranged around the inner catheter, each of the plurality of outer catheters being coupled to the inner catheter to obtain the liquid agent, wherein the plurality of outer catheters separate from the inner catheter when the first catheter array protrudes through a first opening of the cannula.

119. **(Withdrawn)** The agent delivery system of claim 118, further comprising:

another catheter array comprising:

another inner catheter, the other inner catheter obtaining the liquid agent through another catheter port; and

another plurality of outer catheters that are arranged around the other inner catheter, each of the other plurality of outer catheters being coupled to the other

inner catheter to obtain the liquid agent, wherein the other plurality of outer catheters separate from the other inner catheter when the other catheter array protrudes through another opening of the cannula.

120. **(Withdrawn)** An agent delivery system for providing treatment therapy to a volume of neural tissue comprising in combination:

cannula having a lumen distal end, the lumen distal end having a plurality of openings, each opening capable of directing a catheter outwardly along a distinct predetermined trajectory; and

a first catheter and another catheter that are movable within the cannula, wherein the first catheter protrudes through a first opening of the cannula and the other catheter protrudes through another opening of the cannula, the first catheter obtaining a first liquid agent though a first catheter port, the other catheter obtaining another liquid agent through another catheter port, wherein the first catheter is positioned to deliver the first liquid agent and the second catheter is positioned to deliver the other liquid agent.

121. **(Withdrawn)** The agent delivery system of claim 120, wherein the first catheter is insertable within the cannula.

122. **(Withdrawn)** The agent delivery system of claim 121, wherein the other catheter is insertable within the cannula.

123. **(Withdrawn)** The agent delivery system of claim 120, wherein the first catheter is constrained within the cannula.

124. **(Withdrawn)** The agent delivery system of claim 123, wherein the other catheter is constrained within the cannula.

125. **(Withdrawn)** The agent delivery system of claim 123, wherein the other catheter is insertable within the cannula.

126. **(Withdrawn)** The agent delivery system of claim 120, wherein the first liquid agent and the other liquid agent are characterized by essentially a same chemical composition.

127. **(Withdrawn)** The agent delivery system of claim 120, wherein the cannula directs the first catheter along a first predetermined trajectory.

128. **(Withdrawn)** The agent delivery system of claim 127, wherein the cannula directs the other catheter along another predetermined trajectory.

129. **(Withdrawn)** The agent delivery system of claim 120, wherein the first catheter projects from the cannula through the first opening at a first predetermined angle.

130. **(Withdrawn)** The agent delivery system of claim 129, wherein the other catheter projects from the cannula through the other opening at another predetermined angle.

131. **(Withdrawn)** The agent delivery system of claim 120, wherein a first end of the first catheter is positionable on a first surface of the volume of neural tissue.

132. **(Withdrawn)** The agent delivery system of claim 131, wherein another end of the other catheter is positionable on another surface of the volume of neural tissue.

133. **(Withdrawn)** The agent delivery system of claim 120, wherein the treatment therapy is for a nervous system disorder.

134. **(Withdrawn)** The agent delivery system of claim 133, wherein the nervous system disorder is selected from the group consisting of a disorder of a central nervous system, a disorder of a peripheral nervous system, a mental health disorder, and a psychiatric disorder.

135. **(Withdrawn)** The agent delivery system of claim 134, wherein the nervous system disorder is selected from the group consisting of epilepsy, Parkinson's disease, essential tremor, dystonia, multiple sclerosis (MS), anxiety, a mood disorder, a sleep disorder, obesity, and anorexia.

136. **(Withdrawn)** An agent delivery system for providing treatment therapy to neural tissue comprising in combination:

cannula having a lumen distal end, the lumen distal end having an opening; and

a catheter that is insertable within the cannula and that is projectable through the opening along a predetermined trajectory through the neural tissue, the catheter obtaining a liquid agent through a catheter port, wherein the catheter is positioned to deliver the liquid agent to the neural tissue.

137. **(Withdrawn)** The agent delivery system of claim 136, wherein a catheter end of the catheter is capable of being positioned to an approximate location of the neural tissue.

138. **(Withdrawn)** The agent delivery system of claim 136, wherein the catheter projects from the cannula through the opening at a predetermined angle.

139. **(Withdrawn)** The agent delivery system of claim 136, wherein the treatment therapy is for a nervous system disorder.

140. **(Withdrawn)** The agent delivery system of claim 139, wherein the nervous system disorder is selected from the group consisting of a disorder of a central nervous system, a disorder of a peripheral nervous system, a mental health disorder, and a psychiatric disorder.

141. **(Withdrawn)** The agent delivery system of claim 140, wherein the nervous system disorder is selected from the group consisting of epilepsy, Parkinson's disease, essential tremor, dystonia, multiple sclerosis (MS), anxiety, a mood disorder, a sleep disorder, obesity, and anorexia.